

Application No. 10/828,521  
 Reply to Office Action of April 18, 2007

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### AMENDMENTS TO THE CLAIMS

1. (Currently amended) A copolymer composition comprising a compound having the formula:



wherein A is a thermoplastic block copolymer including a monomer  $\begin{array}{c} (C)_n \\ | \\ RZ \end{array}$ ; B is polyisobutylene including a monomer  $\text{---}(D)_m$ ; m and n are each independent integers between 10 and 10<sup>7</sup>; R is an oxygen and an element selected from the group consisting of a chalcogen, nitrogen, and phosphorus; and Z is a cation; and RZ is present on over ~~0.7~~ 70 mol percent of the monomer  $\begin{array}{c} (C)_n \\ | \\ RZ \end{array}$  in copolymer A to provide an ion exchange capacity of between 1.78 and 2.04 milliequivalents per gram of said compound.

2. (Original) The copolymer composition of claim 1 wherein A is polystyrene.

3-4 (Canceled)

5. (Previously presented) The copolymer composition of claim 1 wherein R is SO<sub>3</sub>.

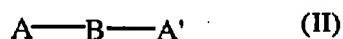
6. (Previously presented) The copolymer composition of claim 1 wherein Z is a cation compatible with R and selected from the group consisting of H, a lanthanide species, an alkaline earth metal and an alkali metal.

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7. (Original) The copolymer composition of claim 6 wherein Z is Cs.
8. (Original) The copolymer composition of claim 1 further comprising a second block A bonded to block B.
9. (Original) The copolymer composition of claim 1 wherein block A is present at levels ranging between 1-99% of the total block copolymer.
10. (Original) The copolymer composition of claim 1 wherein block A is present at levels ranging between 5-90% of the total block copolymer.
11. (Original) The copolymer composition of claim 1 wherein block A is present at levels ranging between 10-70% of the total block copolymer.
12. (Currently amended) A copolymer composition comprising a compound having the formula:



wherein A is a thermoplastic block copolymer including a monomer  $\begin{array}{c} (C)_n \\ | \\ PRZ \end{array}$ ; B is polyisobutylene including a monomer  $\text{---}(D)_m$ ; A' is a thermoplastic block copolymer including a monomer  $\begin{array}{c} (C)_q \\ | \\ PRZ \end{array}$ ; m and n are each independent integers between 10 and  $10^7$ ; R is oxygen and an element selected from the group consisting of a chalcogen, nitrogen, and

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phosphorus; and Z is a cation; P is a phenyl group, and RZ is present on over ~~0.7(n+q) of P~~ 70

mol percent of the monomer  $\begin{array}{c} (C)_n \\ | \\ PRZ \end{array}$  and the monomer  $\begin{array}{c} (C)_q \\ | \\ PRZ \end{array}$  to provide an ion exchange capacity of between 1.78 and 2.04 milliequivalents per gram of said compound.

13. (Cancelled)
14. (Previously presented) The copolymer composition of claim 12 wherein Z is a cation compatible with R and selected from the group consisting of H, a lanthanide species, an alkaline earth metal and an alkali metal.
15. (Original) The copolymer composition of claim 12 wherein R is SO<sub>3</sub>.
16. (Original) The copolymer composition of claim 12 wherein Z is selected from the group consisting of: H, Cs, Zn and Na.
17. (Original) The copolymer composition of claim 12 wherein RZ is SO<sub>3</sub>H.
18. (Original) The copolymer composition of claim 12 wherein block A is present at levels ranging between 1-99% of the total block copolymer.
19. (Original) The copolymer composition of claim 12 wherein block A is present at levels ranging between 5-90% of the total block copolymer.

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20. (Currently amended) The copolymer composition of claim 12 wherein block A is present at levels ranging between 10-70% of the total block copolymer A and A'.

21-30 (Cancelled)